

# Bullets That Kill.

## Uncle Sam Has Found Something New and Deadly in Missiles.

### The Only Serious Defect of the Krag-Jorgensen Arm May Be Remedied.

#### By Clipping the Apex of the Bullet It Can Be Made to "Mushroom."

#### BLEW A DEAD MAN'S HEAD OFF.

#### Before This Discovery the Nickel-Plated Bullet Would Drill Holes in Bones Without Smashing Them and Without Disabling the Wounded.

At last it has been discovered how to fix the bullet of the Krag-Jorgensen rifle so that it will blow open a soldier's head, or splinter his leg, instead of just boring a little hole through him.

The trouble is that if you bore a hole through one of a man's bones without breaking it he is likely to keep on fighting. If only for the sake of forgetting the pain. And if you puncture even his heart or lungs or liver with one of those clean little Krag-Jorgensen punctures it is quite likely that he won't know anything about it until he drops dead a few minutes later; in the meantime he will probably do a little killing on his own account.

It is more important to fix your enemy so that he won't fight another stroke than it is to fix him so that he will die in a minute or two, after firing a few more shots, or slashing with his sabre, or prodding with his bayonet. Hence, the new 30-calibre German silver or nickel-steel jacketed bullet, although it will travel faster and farther than any other missile known, was yet, until this recent discovery, less to be dreaded in some ways than the big old leaden bullet thrown by the Springfield rifle.

The latter, when it encountered a human bone, did not pass through it, but the contact battered the head of it, like a champagne cork or a mushroom, and in this horrible shape it tore around and smashed everything in sight. It was as likely as not to blow a man's leg clean off. In those days a soldier knew when he was wounded. It is the nickel jacket that prevents the newer and smaller bullet from "mushrooming" in this highly effective manner. But all that has been changed now.

In the experiments referred to the apex of one of the 30-calibre bullets was clipped through, to the depth of the outer metal jacket, and then fired at an inanimate target. The apex of several other similar bullets was thus clipped, in varying degrees, and tested upon targets. It was demonstrated that the terrific impact of the bullet at its high velocity was such as to literally drive the leaden core through the tube or jacket and spread it out in a "mushroom" as large as that made by the old style Springfield bullet.

But to this deformed projectile must be added its increased velocity and its extreme hardness. The old bullet would do under its lessened force the range of the new bullet will also do, when this clipped bullet that it has infinitely greater penetrating power and will kill at ranges entirely beyond the limit of the old rifle.

Among its other interesting achievements the clipped bullet, after penetrating the skull of a man, would pop up for a target, "mushroomed" so much that it would break the back of his head into small fragments. Another shattered a hollow tin.

Civilized nations do not countenance the use of explosive bullets. But they like to do their killing in a workmanlike way, so they encourage bullets that "mushroom." What's the idea?

Major F. H. Phelps, late Chief Ordnance

In another illustration the comparative penetration of the new and old style rifles is shown. The old .45 penetrated less than seven inches of pine, while the new .30-calibre was not stopped short of thirty-two inches.

Professor Dyche, who was a member of the Peary expedition, has some bullets taken from the skulls of walrus shot by his party, that show perfectly the effect of the metal jacket in preserving the shape and contour of a bullet. One of the bullets illustrated is a steel-jacketed one, taken from head of a walrus, the animal having been instantly killed by a single shot. The bullet is but slightly indented upon its apex. The others are illustrations of leaden bullets of the same size and weight, fired from the same rifle. They penetrated less deeply, and more than one were required to kill the animal. Various forms of "mushrooming" are disclosed.

With the hardest shooting rifle made, the longest range and the greatest penetration already accomplished, our army, if it is decided to clip the new bullets, will have the most destructive and efficient small arm ever put into the hands of the soldier.

It would take a large sized book to describe the unique appliances which will be used in the next war. In the first place, there is the bicycle, and right here it should be stated that the bicycle with the past year or two has been recognized the world over by the great military generals and strategists as of supreme importance in time of war. The United States Military School, representing State militia and regular army soldiers and officers the country over, has been in existence some time.

In many of the States there are bicycle regiments and companies; there are bicycle companies in the regular army, and it is only a question of a short time when bicycles will become general in all military evolutions. When these are in use, marches of one hundred miles or more will be made in the light of one day. Forced ones of double length will easily be made in twenty-four hours. The bicycle needs but little oil and is always ready.

It is also apparent to progressive military men that with the advent of the bicycle must come the advent of the horseless carriage in the army provision train.

Another important bearing of the compact road motor upon modern warfare will be the possibility of hauling field cannon without the aid of horses. The field piece is the chief instrument of warfare to manage during a retreat. For this reason alone cannon are so often deserted in the field to fall into the hands of the enemy.

When good roads make the horseless conveyance popular, we will have to propel our cannon at a rapid rate, on the march, to keep up with the rapid pace of the bicycle cavalry and infantry and the provision wagons propelled by the storage battery, gasoline, kerosene, petroleum and other motors.

It looks as if the army mule was doomed to pass away, like the cart horse. Not only will the army wagon and the gun carriage be propelled by their own force, but great movable fortresses will be brought into use. These will be armored like the new iron ships and tenanted by a score or two of sharpshooters and rapid-fire guns. They will readily be moved from place to place and be practically impregnable.

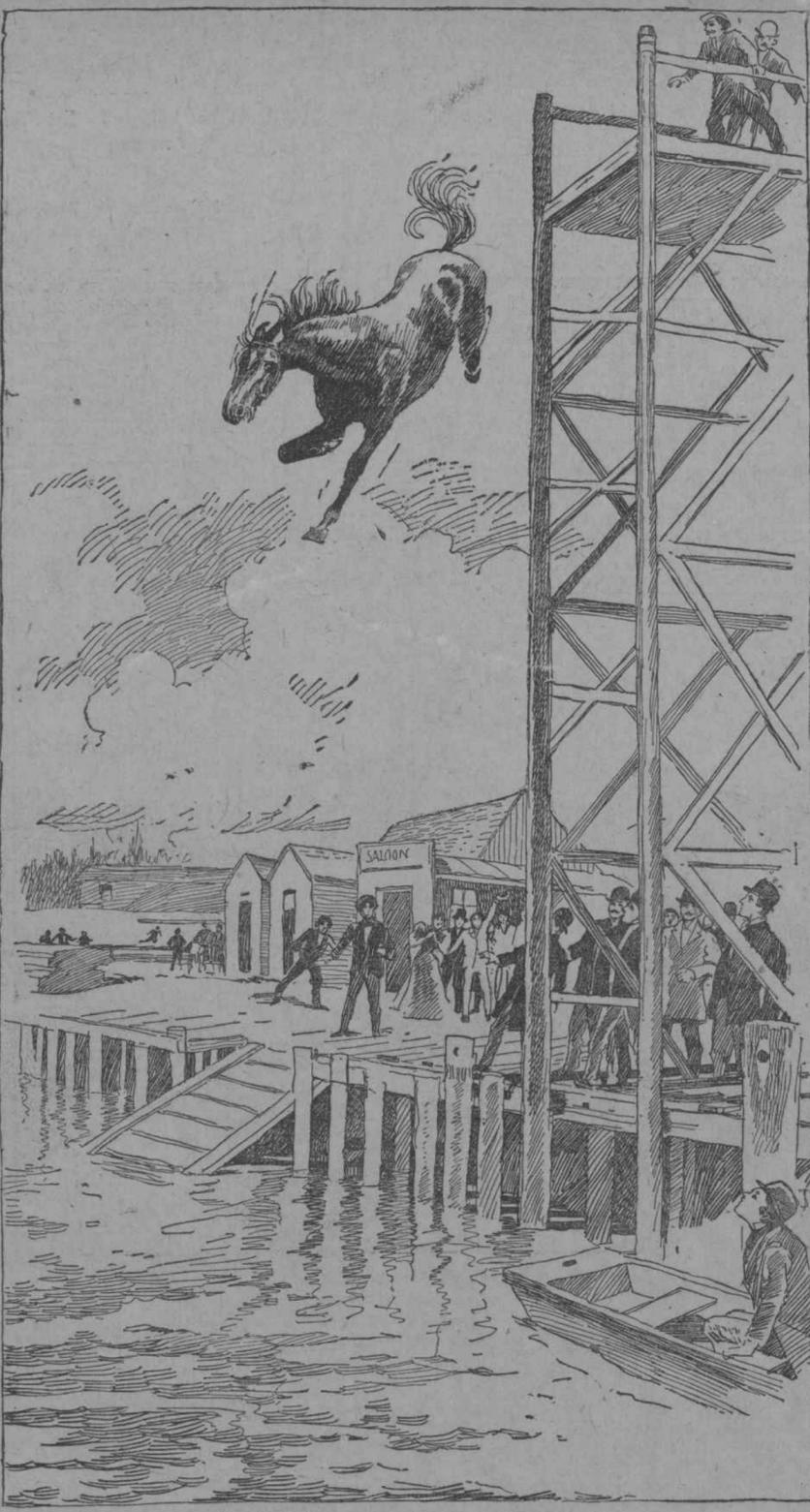
A travelling fort court not destroyed nearly so quickly as a warship, for the reason that there is no water to risk into. These will be armored like the new iron ships and tenanted by a score or two of sharpshooters and rapid-fire guns. They will readily be moved from place to place and be practically impregnable.

The submarine torpedo boat will also come into play. Naval scientists have been working on this problem for years, and it is believed that each one of the great nations has a submarine boat capable of doing efficient work. Such a possession would be treasured as a secret of great value, and every possible means adopted to prevent other nations from learning the details of its construction.

The fact that M. Goubet, a French inventor, has, after four years of work, completed a submarine boat which has been satisfactorily tested is proof that this deadly vessel will figure in the next war. Other nations from learning the details of its construction.

An idea of the deadly powers of one of the new rapid-fire guns can be gained from the fact that the new Hotchkiss machine gun fires ten shots a second, or 600 shots a minute, or 36,000 shots an hour. Unlike most other machine guns, this new weapon has but one barrel and all the bullets pass through it and all the explosions take place in the same powder chamber. At first thought it would seem impossible to operate such a gun without causing the chamber and barrel to heat in a very short time to such a degree as to render further firing impossible, but this trouble has been overcome by an ingenious yet extremely simple arrangement, the essential features of which are that the barrel is permanently fixed in the breech and that none of the moving parts is subject to the heat developed by the power gas.

In France the gun has been fired rapidly for three hours, during which time 100,000 cartridges were discharged, without any inconvenience because of expanded parts.



(Sketched by an artist on the San Francisco Examiner.)

## The Horse Diver Makes His Thirty-Foot Leap.

They have a strange attraction at one of the popular pleasure resorts in Seattle. A horse leaps thirty feet down into the deep water of Lake Washington and swims to the shore. Thousands of people congregate to witness the wonderful and amusing performance.

A high platform is constructed on the edge of the wharf, which is just wide enough for the horse and two men. As the horse ascends to the platform he seems to be in his delight, and, standing at the top, he tosses his head around to look at the crowd with a very proud air, and one can almost imagine him saying in his egotism: "Look at me! I am the only horse in the world that can perform such a feat!"

Every one holds his breath as the word "Go" is said until he reaches the water. Down, down he goes, and when he rises to the surface a cheer from the crowd goes up, and he at once begins to swim toward the shore, and as he reaches it he leaps up among the crowd, a glossy, black, beautiful animal. His master, who is waiting for him, grasps his bridle and immediately starts him off on a run, and keeps him moving until he is thoroughly dry.

When the water is very cold he often shows evident signs of weakening, and needs a great deal of urging before he will make the leap. At such a time one cannot help but feel it is a cruel sport. The cold water sometimes bewilders him, and he does not seem to know in which direction he shall swim, and often finds himself under the dock. At such times a man rows out in a boat and leads him to shore.

At a gun of this kind could annihilate in a few minutes, a regiment armed with the weapons of thirty years ago.

**Awful Discovery.**  
[Colony (Ont.) Sentinel.]  
Hatred of England permeates the school books on which American youth are suckled.

**Tut! Tut!**  
[Buffalo Express.]  
The New York correspondents of the London journals are a rare lot of liars.

## WHERE PIRATES NESTED.

The Best Possible Bases for Attacks Upon the American Continent and Upon Shipping.

The British West Indies and British North America stand on widely different footings. The Canadian dependencies include Newfoundland, Prince Edward Island, Cape Breton and Vancouver, and yet the group of northern possessions is distinctly a continental formation. Sub-tropical British Honduras and British Guiana upon the mainland, is practically an archipelago—a series of points of departure. In Canada the drawbacks to fuller and more profitable occupation of the country are the ice and snow of Winter; in the West Indies, fever and the hurricanes of Summer and Autumn are the enemies of the settler. Since Sir Walter Raleigh reported to Queen Elizabeth that the Caribbean was "a hellish sea for thunder, lightning and storms" the passage round the break of an Atlantic coast to the Gulf of Mexico has always been dreaded by mariners, as much by reason of these natural perils as of the buccannery who so long infested the islands.

From the time of the treaty of Paris in 1814 the British territory in the West Indies has neither increased nor diminished, but the favor of fighting and adventure still hangs about the Antilles. While Canada has always been under either English or French domination, the West Indies seem to have invited the efforts of all colonists. The Spaniards, the French, the Dutch, the English, the Danes, all played a part in the history of the islands, and each of these nations still retains some shred of interest in the archipelago. The Swedes, too, once owned an island, and the Portuguese, on their way to Brazil intruded upon the Spanish seas and named Barbados. Throughout the seventeenth and eighteenth centuries most of the smaller islands changed hands frequently, and in St. Kitts colonists of rival nations settled side by side. But Spain was the benefactor always, and wherever the buccannery established themselves they harried the representatives of Spain, making war upon law and order, leading the way to British rule. To-day the British dependencies are tranquil, and the great Spanish island is agitated by the demands of the slaves, but in the good old days there was order where Spain held sway, and quarrels elsewhere. By the ancient dates of British occupation by no means ended the story, and some of the islands which were peacefully acquired afterward became the scenes of repeated conflict.

There is in the nature of things an irreconcilable disparity between the conditions of life in the West Indies and the theory of American development. Our fidelity to the democratic tradition demands that the United States shall be peopled by a homogeneous race, the system of term-labor by aliens is as repugnant to our ideas as the system of slave-labor. Politically we have absorbed the negro race in our own South. In the British West Indies the negro, emancipated from compulsory toil, ceased to accept the conditions of nature, and coolies from British India are taking his place. The English themselves never become identified with their domicile; they are outposts, commercial as well as military and naval, but outposts always. One English statesman after another, and notably Sir Charles Dilke in recent times, has remarked that the Government of the United States may wish to see the British of the islands, and the West Indies at an end, but would never wish to annex the islands on account of the inevitable necessity for an inferior laboring class.

Even when George Washington contemplated taking the Bermuda and Antigua, he contemplated no such action in the case of the islands further to the south and west. Nor have they ever been made part of any broad project for the furtherance of American progress; they have always been "bad eminences on the sea."

The history of the larger islands, Jamaica, in particular, is in many respects more definitely conquered and settled by England. But the smaller islands have more frequent changes. With two or three exceptions of which Barbados is the chief, they were visited, settled, abandoned, resettled, handed about from one owner to another. In the bartering between the nations they were thrown first into one scale, then into another, "knapsack" to adjust this or that unsettled bargain. For a long time they afforded a happy hunting ground to Europe. Their small size and the facility with which they could be suddenly attacked made them easy prey of conquest, and their dulceness invited settlement, and the weakness of their negro inhabitants invited aggression. Quickly depopulated by war or by natural calamities, they were as quickly re-peopled by immigration—or, rather, importation of subject races.

But through it all the West Indies have attracted the attention of European natives less because they themselves are a desirable territory than because they are the key to the South Atlantic coast of our own country.

## Effect of Krag-Jorgensen Bullet on Human Bone.

(From photographs.)

Officer of the Department of the Missouri, but now stationed on Governor's Island, was asked regarding the use of the clipped bullet. Among other things he said: "I have heard of some of the tests made with the bullets altered as you describe, but there have been no official tests so far as I know, nor has any great importance been attached to the matter. It had, if I would have been informed of it."

"It is true that the 30-calibre bullet has not the stopping power of the old .45. It was never expected that it would have, but it is believed that the increased range and the fact that the small bullet would more than compensate for this loss. Many officers, I believe, are of the opinion that we are using far too many small calibre. The navy is down to a .226, I believe, I can readily understand the added power to produce shock which might be attained by clipping the bullets in the manner described."

"But would not that be inhuman? Would it not be deemed barbarous to thus add to the wounding power of an already very dangerous missile?"

"We do not go to war for humanity's sake in this generation," said the Major. "In case of war we must do all the harm we can to an enemy. The use of explosive bullets is never resorted to by civilized nations, and is contrary to the rules of war between nations. But a bullet that mushrooms is not an explosive bullet, any more than the old leaden .45 bullet was explosive. It is true that this would add to its power to inflict a wound and to its stopping power, but as to its fatality, I don't see how it could create that. You know that sportsmen hunt large game often drill or hollow out the apex of a rifle bullet, to make it spread when it strikes. That it does to produce greater shock, and it always attains its object."

In tests made with the new rifle at the Frankford Arsenal, upon cadavers, the fearful force of the little bullet is shown conclusively. The rifle was fired with reduced powder charges at comparatively short ranges, but with a velocity common at 1,200 and 1,500 yards. The bones, after having been shot through, were cleaned and subsequently photographed. It is needless to attempt a technical description of the tests and effects, as the pictures reproduced herewith tell their own story in language that may be plainly understood by any one.

The first cut shows the head of the thin, perforated clearly by one of the 30-calibre bullets at a velocity common at 1,200 yards. The second illustration shows the reverse side of the same bone, showing the exit of the tiny bullet.

The Self-Steering Sled. The Bicycle. Far Weak Ankles. The Aluminum Skates. The "Sparktoetting."

## They Don't But No Ice In Fact, They Are Designed to Skim O'er It Like a Bird.

### Novelties in Which Skater and Coaster May Revel This Winter.

#### A Bicycle That Goes on Ice and a Sled Which Steers with a Bar.

#### QUEER SKATES FROM SWEDEN.

#### Clever Combinations of Old Methods with New Ideas—The Bloomer Girl to Be a Feature of the Season.

When Jack Frost holds the red ball this Winter at the parks some curious inventions in the way of skates and sleds will be seen. They are as great improvements over the modern articles of this sort as the club skate and the "pointer" were over what our forefathers and mothers used to have.

One of them is an aluminum skate that has a runner sixteen inches long, fastened to a wooden footboard of the fashion of 1850. There is a screw in the heel of the footboard that fastens into the shoe of the skater, while a strap passes over the toes. The lightness of the aluminum and the firm hold on the ice afforded by the unusual length of the runner enables the skater to attain great speed.

Next comes the ice bicycle, which resembles a "safety," and is propelled after the same fashion. Instead of a front wheel, the upright rod which connects with the handle bars has a long steel runner, half an inch wide, connected with the wheel end. Like the front wheel of the bicycle, this runner is used to steer the machine.

A rod which extends downward from the framework behind the seat has another steel runner fastened to the end. Back of all is a metal wheel, spiked with steel teeth. This is the wheel that sends the bicycle ahead, and is operated by a sprocket chain that passes around the pedal shaft. The inventor believes nearly as great speed can be attained with the bicycle as with the ordinary road machine.

Then there is a sled that does away with that old-fashioned method so dear to the hearts of all boys—some girls, too—of lying face downward on the sled and steering with the toes. This sled has flexible runners that are turned up at one upright bar attached to them, which enables the coaster to sit upright and navigate at ease.

One of the oddest of all the new inventions, however, is a skate imported from Sweden, called "sparktoetting." The runners are made of seasoned Norwegian pine. They are six feet long and curve upward in front. The hand supports and guides are two upright bars, fastened to the center of the runners. The skater places one foot on the runners and propels himself by striking the runners with his hands, runners with his other foot. It is a simple device, but the people who are introducing it in this country believe that a skater can attain a wonderful speed.

For feminine skaters the manufacturers have revived the old wooden footboard. In some cases they have attached to the runners are made of seasoned Norwegian pine. They are six feet long and curve upward in front. The hand supports and guides are two upright bars, fastened to the center of the runners. The skater places one foot on the runners and propels himself by striking the runners with his hands, runners with his other foot. It is a simple device, but the people who are introducing it in this country believe that a skater can attain a wonderful speed.

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## Horrors of Cannibalism.

[London Saturday Review.]  
The cannibalism of the black secret society known as the Human Leopards, in the country near Sierra Leone, disclosed by the recent trial, brings forcibly before us the difference between the East African and the West African habits of eating human flesh. The Sherbro cannibals would eat and killed their victims and ate them, but the Human Leopards would eat and killed their victims and ate them, but the Human Leopards would eat and killed their victims and ate them.

## Bad Season for Lecturers.

[Washington Post.]  
Hon. George E. Wendling, the brilliant platform orator, has just returned from a lecturing tour in the West, and was in the city yesterday. He has taken No. 121 Jefferson place for the Winter, and his family will return from their country place to the city next week.

Mr. Wendling, speaking of the platform, said: "A singular series of fatalities has befallen the lecture field in the last month. First came the death of Eugene Field, with a long list of brilliant engagements ahead of him. Then, Prof. Ragab, the finest illustrated lecturer next to Stoddard, died while lecturing in Atlanta. Then, ten days ago, Bill Nye broke down physically. The celebrated traveller, Colonel Sandford, died on a lecture tour Colorado. Last week Major Dane, a very popular lecturer, died and was buried at sea while on his way home from Australia. And now comes the news that Joseph Cook is seriously and perhaps fatally ill in Calcutta, India. Six very bright men in one month is a heavy loss to the lecture courses of the country."

## Setting a Croaker.

[Household News.]  
For grim humor, it would be hard to surpass Abdul Rahman, an Afghan, if the stories told of him are true. One day he was running the account—the Amer was holding his durbar, when a man entered and began to utter solemn warnings about the insidious advances of the Russians. The Amer, who knew quite as much about Russian aims as his lieutenant, listened for a time with some show of patience. Still the man went on croaking. "Lord of the Earth," he exclaimed at last, "let people say what they like, but this humble one has been scanning the political horizon with far-reaching eyes, and he Russians are coming!" "Bring me a jewel of your durbar and son of your understanding," said the Amer, "and I will listen to this." "The Lord of the Earth is omniscient," replied the political prophet.

## Ultimatums Played Out.

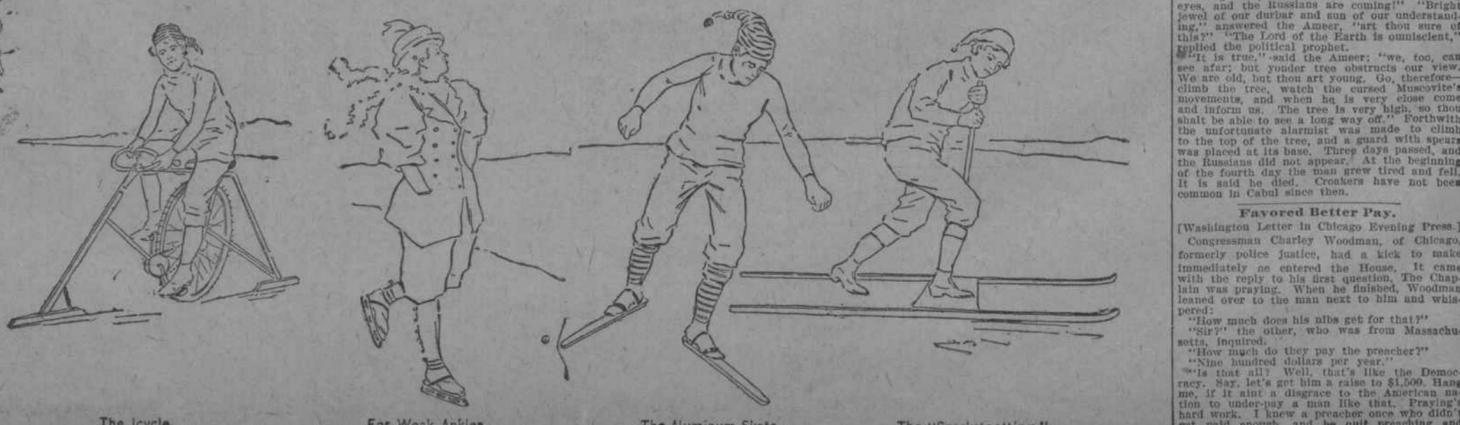
[Fort Worth Gazette.]  
If Britannia wants any more Western territory she will have to come and take it. Ultimatums were ultimate.

## Favored Better Pay.

[Washington Letter in Chicago Evening Press.]  
Congressman Charles Woodman, of Chicago, formerly police justice, had a kick to make immediately on entering the House and came with the reply to his first question. The Chaplain was praying. When he finished, Woodman leaned over to the man next to him and whispered: "How much does his wife get for that?" "Sixty," the other, who was from Massachusetts, inquired.

"How much do they pay the preacher?" "Sixty hundred dollars per year."

"Is that all? Well, that's like the Democracy. Say, let's get him a raise to \$1,500. Hang me if I don't disagree with the American nation to under-pay a man like that. Praying's hard work. I knew a preacher once who didn't get paid enough, and he quit preaching and went to tending bar."



The Self-Steering Sled. The Bicycle. Far Weak Ankles. The Aluminum Skates. The "Sparktoetting."